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ABSTRACT

This publication is intended to serve as a strategic guide for the U.S. Government Printing Office in the development of its tactical plans for entry into the next millennium; to provide a glimpse of the future of Government information; and to delineate the changes that lie ahead in how information will be created, replicated, and disseminated. After presenting the GPO mission statement, goals, and key concepts, eight modules are used to define the strategic planning process in terms of goals and activities: (1) Human Resources--determine future needs in recruitment by gathering data on the present workforce and projecting retirement rates; (2) Training--gather data on present training efforts to determine future training needs and retool to meet these needs; (3) Products and Services--determine customer needs for the next decade by analyzing present products and services, and projecting changes in demand; (4) Technology--determine technology needed to meet customer demands by analyzing present equipment and exploring new technology that should be introduced into GPO; (5) Organizational Structure--determine best organizational structure to meet future product and capability needs by analyzing current and past organizational structures, and explore alternatives; (6) Financial Resources--determine resources needed and their availability by analyzing financial strength and resources, and explore alternatives; (7) Facilities--determine proper type, location, and work environment for GPO facilities by analyzing present facilities and explore available alternatives; (8) Legislative Environment--determine legislative changes required and analyze changes needed to accommodate GPO 2001. Each of these goal and activity areas is discussed in detail, and an outline of tactical plans for each area concludes the report. (ALF)

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GPO/2001:

Vision for a New Millennium

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U.S. GOVERNMENT PRINTING OFFICE

GPO/2001: A message from the Public Printer

Government information is essential to the management of Government operations, the maintenance of a system of public accountability, the conduct of our sophisticated economy and society, and the preservation of the right of self-government in our continuing experiment with liberty.

The value of Government information was recognized by our Founding Fathers. Said James Madison:

> A popular Government without popular information, or the *means of acquiring* it, is but a Prologue to a Farce or a Tragedy; or perhaps both. Knowledge will forever govern ignorance: And a people who mean to be their own Governors, must arm themselves with the power that knowledge gives.

Today, the United States Government Printing Office (GPO) serves as the *means of acquiring* Government information that Madison spoke of, providing information products and services for Congress and more than 130 different Federal agencies, and distributing Government publications to the public through a variety of methods, including the popular Sales and Depository Library Programs.

For 130 years, GPO has performed its mission by using conventional print technologies. But the advent of electronic information technologies—of rapidly evolving computer and telecommunications capabilities—has awakened us all to a new awareness that Government information—the content of books, reports, journals, and databases—has an intrinsic value independent of the format in which it is replicated and disseminated.

To this new awareness have been assigned new values—timeliness, portability, accessibility, diversified and simplified storage and retrieval capabilities—that correspond to the new universe of opportunities made possible by the innovative use of electronic information technologies. ***It is to transforming this new universe of opportunities into a reality that GPO is committed in the continued performance of our fundamental mission.*** The *means of acquiring* Government information is changing, and GPO will change with it.

In the coming years, GPO will be transformed from an environment dedicated to traditional print technologies to an integrated information-processing operation distinguished by the electronic creation, replication, and dissemination of

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information. ***This transformation will be evolutionary, not revolutionary. We will preserve the strengths of our current operations while exploring and advancing the new opportunities of the electronic information era.***

Print will not disappear, but will continue to be used when it presents itself as an effective, efficient information option. With this strategy, the decision to print will become one of several information alternatives in a publishing environment based on electronic information technologies and processes, an environment keyed to the new values of the electronic information era.

What does this strategic vision mean for GPO's stakeholders?

- ***For Congress, it means the provision of rapid, on-line, full-text search and retrieval capabilities for information that is vital to the legislative process.***
- ***For Federal agencies, it means the development of new information partnerships with a GPO equipped, staffed, and committed to assisting in the effective management of agency information products and services, from creation through replication and dissemination to the Government information user community.***
- ***For Government information users, it means the advent of rapid, simplified, lower-cost access to an expanded range of information products and services that are essential to the daily conduct of life in our increasingly complex society.***

This is the strategic vision that GPO is committed to implement as we approach the 21st century. It aligns GPO with the new universe of opportunities made possible by the electronic information era. It recognizes the increasing interdependence of all stakeholders in the Government information community. It offers new opportunities for improving the cost, timeliness, and quality of information products and services to that community, and to the American taxpayer. And it reaffirms GPO's responsibility to continue serving as the *means of acquiring* Government information products and services in the coming years, a responsibility well served by the men and women of GPO for the last 130 years.

ROBERT W. HOUK
Public Printer

December 1991

GPO/2001: A message from GPO's Senior Management

Many people at GPO have spent much of the last year preparing this document—a strategic vision to guide GPO in the development of its tactical plans for our entry into the next millennium. We are pleased to share this beginning step with our co-workers at GPO, as well as our customers in Congress and the Federal agencies, depository librarians, and other stakeholders in the Government information community.

Before proceeding, let us address one question that has been on everyone's mind:

Does GPO have a future?

From the outset, we want to assure everyone that ***GPO does indeed have a future. And we also want to let everyone know right up front that it will be a vibrant and exciting future.***

Certainly, no one can deny that GPO's future will be filled with change, and change will be difficult at times. But GPO must be willing to change if we are to make the future a reality. GPO must embrace, adopt, and advance new and different ways of creating, replicating, and disseminating information products and services to help bring the Federal Government fully into the electronic information era. And GPO must provide these products and services cost-competitively, continuing to be an effective and efficient means of creating, replicating, and disseminating Government information products and services.

Remarkable changes lie ahead in how information will be created, replicated, and disseminated. Remarkable changes lie ahead in how information will be used. Our role in these changes is of great importance. As one of the largest producers and disseminators of information in our Nation, we will set new standards for ourselves and those who follow us.

Clearly, our path means that our future also may be filled, at times, with some controversy, both inside and outside the walls of GPO. We must be willing to accept this controversy, learning to use it as a method of questioning that represents a means to our end. In addressing controversy, our plans will be made ever the wiser, more prudent, and successful.

As the formats in which information can be communicated have changed during the last two decades, confusion over the best uses of new information technologies

has been widespread in industry, Government, and our everyday lives. As you read the pages ahead, we believe you will realize that GPO has a vital role to play in the future of Government information, helping to end much of the confusion that has surfaced.

The pages ahead provide us with a glimpse of our future. It has been exciting to manage this project, and it is exciting to share it with you. We are looking forward to the part we will play in making this vision a reality, and we trust each of you will do the same as you read the pages ahead.

WILLIAM A. HOHNS
Deputy Public Printer

VINCENT F. ARENDES
Assistant Public Printer,
Chief Financial Officer

MICHAEL F. DIMARIO
Assistant Public Printer,
Operations & Procurement

JAMES N. JOYNER
Assistant Public Printer,
Administration &
Resources Management

WAYNE P. KELLEY
Assistant Public Printer,
Superintendent of Documents

GPO/2001: A glimpse of the future

The United States Government Printing Office (GPO) has been through many changes in the past, and its people have a distinguished history of accommodating change in the best interest of the Government and the American taxpayer.

Surely, the future holds more change. But ***the change ahead represents a revitalization of GPO, and presents distinct opportunities.*** While consolidation of many traditional GPO activities will occur, growth and expansion of GPO's products and services will be the hallmark of our future as we expand our electronic horizons.

A bit about the process

Eight separate planning modules were defined early in our strategic planning effort, each selected to provide a comprehensive view of GPO's activities, products, and services—both past and future. Each of these modules is outlined briefly in Figure 1 on the next page.

Most of the data collection phase of the modules is now complete, although there remains considerable work to be done in moving our strategic effort from a vision to a reality (see *The implementation process ahead* beginning on page 41).

Still, sufficient progress has been made to allow this glimpse of GPO's future to be assembled. This glimpse also allows our preliminary conclusions to be viewed by GPO's stakeholders, including:

- Congress, as GPO's primary customer;
- GPO's other customers in the Federal Government;
- GPO's employees and their labor representatives;
- the Joint Committee on Printing, GPO's oversight committee;
- other Congressional committees interested in GPO and Federal information policy;
- the private sector printing and information industries;
- the library community; and
- the public.

This glimpse of our future, and the constructive and open dialogue, questions, and critiques that we know will ensue, will afford us the opportunity to fine tune this vision into the best possible tactical plans to meet the needs of our customers.

MODULE GOAL	MODULE ACTIVITIES
1. Human Resources	
Determine future needs in recruitment and related efforts	Gather data on present workforce; project retirement rates through the year 2000 by function, organization, and other characteristics
2. Training	
Determine training needs for future; retool GPO efforts to provide for future needs	Gather data on present training efforts, determine alternatives for future training
3. Products and Services	
Determine products and services required by customers during the next decade and beyond	Analyze present products and services, project changes in demand in future years
4. Technology	
In concert with Product and Services Module, determine technology needed to meet customer needs in the future	Analyze present equipment, explore technology that should be introduced into GPO
5. Organizational Structure	
Determine proper GPO organization to best meet future product and capability needs	Analyze current and past GPO organizational structures, explore alternatives available
6. Financial Resources	
Determine resources needed and availability of resources to fulfill needs	Analyze financial strength and resources, explore alternatives available
7. Facilities	
Determine proper type, location, and work environment of GPO facilities	Analyze present facilities, explore alternatives available
8. Legislative Environment	
Determine legislative changes required	Analyze changes needed to accommodate GPO/2001

Figure 1. *Modules, GPO/2001*

GPO/2001: The fundamentals

GPO's mission

Simply put, GPO's mission will be:

> ***To assist Congress and Federal agencies in the cost-effective creation and replication of information products and services, and to provide the public with the most efficient and effective means of acquiring Government information products and services.***

This mission is no different from GPO's historical mission. The electronic information era, however, requires that we *embrace, adopt, and advance the use of electronic methods and formats to accomplish our mission.* In order to provide high-value, cost-effective information products and services in the future, much of it will have to be in electronic formats. In order to disseminate information efficiently and effectively, and to encourage its broadest and most effective use, electronic formats will likewise be required.

It also is essential that we become highly cost-competitive in every product and service GPO offers, both internally and externally. Cost-effectiveness, efficiency, and value in support of the needs of Congress, Federal agencies, and the public are basic principles on which we must build our future, and they require what will be, at times, fundamental changes in our organization.

Strategic goals

Public Printer Robert W. Houk, following his confirmation in March 1990, established three primary goals for GPO:

- maintaining and improving customer satisfaction with GPO's products and services;
- modernizing GPO's plant, equipment, and workforce; and
- determining, and pursuing, GPO's future role in the Federal Government.

GPO/2001 is consistent with and extends all three of these primary goals. Additionally, this vision provides the determination of GPO's future role and the manner in which we shall pursue this role.

Fundamental changes in the information industry

Remarkable changes have occurred during the last two decades in the communication and information industries that have had profound impacts on the traditional graphic arts industry. In many ways, the graphic arts industry has now become a subset of the broader communication/information industries, and increasingly is surrendering its once dominant role as an information provider.

Cultural changes also have occurred that have had a broad impact on the manner in which people expect to access information. Today's students actively learn with computers, and use video as a primary information medium, in sharp contrast to students of less than a generation past.

And the rate of change continues to accelerate with continual technological advances that affect us all in how we access and receive information. Among the key technologies driving the future of information are:

- the expanding base of personal computers, today a common tool in the workplace and, increasingly, a tool found in the home;
- digitization of previously analog forms of information, providing images of every conceivable type in electronic form;
- previously specialized tools of the graphic arts industry, such as typefaces, becoming generalized tools of the information industry;
- expanding networks of computers, including many information services commonly available from the private information industry;
- satellite and telecommunication networks, capable of handling vast amounts of data in seconds;
- the increasing use of color to add impact to a broad variety of information products;
- rapid advances in print-on-demand and scanning technologies, including color;
- the burgeoning video market, as VHS has become a broad standard for information;
- high definition television (HDTV); and
- mass storage electronic products like CD-ROM, and increasingly available alternatives that allow writing, erasing, and rewriting to these media.

All of these technologies have a dominant theme—the ability to provide information to people in the forms in which they desire it and from which they can learn most easily. And all of these technologies hold a challenge to the graphic arts industry—that we grow to bring the unique visual talents we have developed over the last 500 years in presenting information in analog formats to the new digital formats.

GPO/2001 provides GPO with the vision that will allow GPO to grow with and adopt these new technologies, and meet this challenge.

Ten key concepts

GPO's future is about change, consolidation, customers, and becoming cost-competitive. It also is about efficiency, expansion, and excellence. Finally, it is about quality, simplification, and partnerships. These ten key concepts will define our future:

- a willingness to adopt ***change*** aggressively;
- ***consolidation*** of our traditional production capacity to effect cost savings and provide better service to our customers;
- a true focus on the needs of our ***customers;***
- the drive to be ***cost-competitive*** in every aspect of our organization, providing the highest possible value for our products and services;
- an emphasis on streamlined operations and the highest levels of ***efficiency;***

- the ***expansion*** of key products and services, reflecting our dedication to electronic formats for information;
- ***excellence*** in our products, services, methods, and processes;
- a commitment throughout GPO to ***quality***;
- a drive to ***simplify*** our systems, methods, and organization; and
- a newfound ***partnership*** of knowledge and technical expertise actively shared with our Congressional and agency customers and information users, to best serve their needs.

Creation, replication, and dissemination

GPO essentially does three things:

- We create the forms information products and services take in accordance with the specifications and needs of our customers (as distinguished from the function of authoring, which remains with our customers).
- We replicate, or reproduce, information as distinct products and services.
- We disseminate information products and services.

Electronic information technologies, with their continued development and increasing sophistication, are impacting these activities in a number of fundamental ways.

The use of electronic formats effectively merges the creation and dissemination activities. In the traditional print process, the activities of creation, replication, and dissemination are separate and distinct:

- We create information in its prepress format.
- We then replicate the information in print.
- Finally, we physically disseminate the finished information products.

Today, and increasingly in the future, electronic technologies bring the creation and dissemination of information together at a single moment in time. The instant information is created electronically is virtually the same moment that the information can be disseminated.

Because of this technological merger of the creation and dissemination activities, GPO will be looked upon by our Congressional and agency customers to become a partner in both the creation and dissemination of information products and services. As we build our technological knowledge base, GPO will be recognized as a

Print-on-demand and mass production: Future roles for print technologies

Print-on-demand technologies will allow the cost-effective replication and faster turnaround of small quantities of printed materials. Their employment by GPO will give information users the ability to print selectively only the precise content they wish to read or review, with the potential to save substantial natural resources, costs, and time. They also will allow specialized print versions, such as large type editions, to satisfy the diverse information needs of our entire society.

Print-on-demand technologies will remain expensive, however, when compared to traditional print mass production. It is difficult today to find print-on-demand technologies with costs approaching less than 2 cents per 8.5" x 11" page (with many print-on-demand technologies costing considerably more). Additionally, it is difficult to envision future improvements in print-on-demand technologies—due to the mechanical nature of the technology, the cost of cut sheet paper, and the cost of consumables—that will drive this cost down to even a penny. All information users bear a responsibility in the use of these technologies to ensure that their employment is appropriate, and that total costs are minimized.

Economies of scale in the mass production of printed information that realize costs well below a penny are achieved easily today, and will continue to be in the future. As a result, traditional print technologies will continue to have an important place in the future of information, both because of cost-effectiveness and because of reader demand for the familiarity, portability, convenience, and flexible use that print offers.

source of technical expertise that information specialists throughout the Federal Government can turn to for assistance in the most cost-effective and efficient creation, replication, and dissemination of information products and services.

It is important to note that the increasing use of electronic formats ***does not mean the elimination of print.*** However, fundamental changes will occur in the Government's traditional reliance on print formats produced by GPO:

- ***Overall, less information will be printed.*** While some information will remain exclusively in print because of its unique characteristics or user needs, electronic formats will be the only requirement for other information products and services. This will be particularly true for statistical, bibliographic, scientific, and technical information, for which electronic technologies are especially well-suited. In many cases, however, multiple formats (print products, electronic products, and on-line services) will co-exist as the best alternative to meet diverse user needs on a cost-effective basis.
- ***Because information will be created electronically, increasingly it will be available first in electronic formats.*** This will change the time sensitivity of getting information into print. Schedules for traditional print products will be extended. In partnership with our customers, more planning will go into the optimum print format, size, and use, in part driven by both the cost savings that can be realized and the Government's conversion to the metric system. Condensation of information will become a growing trend in traditional print products.

- ***Print-on-demand technologies increasingly will be used for the occasional and smaller quantity printing of information.***
- ***There will be an expanded capability to incorporate images, graphics, and color in both electronic and traditional print formats,*** due to continuing advances in electronic information technologies, the continuing drop in the price/performance ratio of these technologies, and the growing understanding of the impact these elements have on presentation.

Together, these changes mean that the replication processes for Government information, including print, can be enhanced and made more cost-effective and useful to information users. Finally, because of the partnership role that GPO will build with information specialists in Congress and Federal agencies, new opportunities for expanding and enhancing the dissemination of Government information products and services will be realized.

As an extension of its partnership role, GPO will become a repackager of information, working with Congressional and agency customers, the private information sector as appropriate, and information users to combine information into more comprehensive, user-accessible sets.

For example, statistical information from the Bureau of the Census, Department of Labor, Department of Commerce, and other agencies, might be combined into a single product with the greatest common use to the public. Perhaps called FEDSTATS, for Federal Database of Statistical Series, such a product clearly would address the needs of information users for ease of access to, and use of, statistical information products and services.

Other repackaged publications might be compilations of previously disparate information into single information products or services. For example, it would be possible to print-on-demand—or provide in electronic form—a compiled legislative history of a bill. This compilation would include all related documents such as the introduced bill, committee hearings and reports, amendments, floor debate, vote results, bills as passed, conference reports, and the final statute. Or the compilation could include only those portions desired by the user. Importantly, the form such a product or service would take would be driven by the needs of the information user.

Many examples of effective combinations that could be created from presently disparate information abound. GPO must serve as a catalyst in locating these combinations and helping to create them.

GPO/2001: Specific strategies

Human Resources

Total GPO employment has fallen significantly during the past 15 years, from more than 8,500 as recently as 1975 to approximately 5,000 today. Based on the exact demographics of GPO's current workforce, including such factors as the age of each employee and their years of Federal service, the present workforce at GPO—***assuming that GPO does not replace any person who retires***—would drop to under 2,000 by the end of this decade.

A workforce of this size would be inadequate to perform GPO's mission. ***Under current and projected workload requirements, GPO's workforce reasonably cannot be projected to fall below 4,500 over the next decade.***

And actually, during the short-term (1993-96), GPO likely will be required to grow slightly beyond our present workforce level. This growth will result from the need to continue traditional print products while simultaneously making the transition to electronic products and services. GPO's workforce trends are shown in Figure 2 below.

This pattern of anticipated retirements from GPO offers a significant opportunity to reshape our workforce to meet our mission in the years ahead.

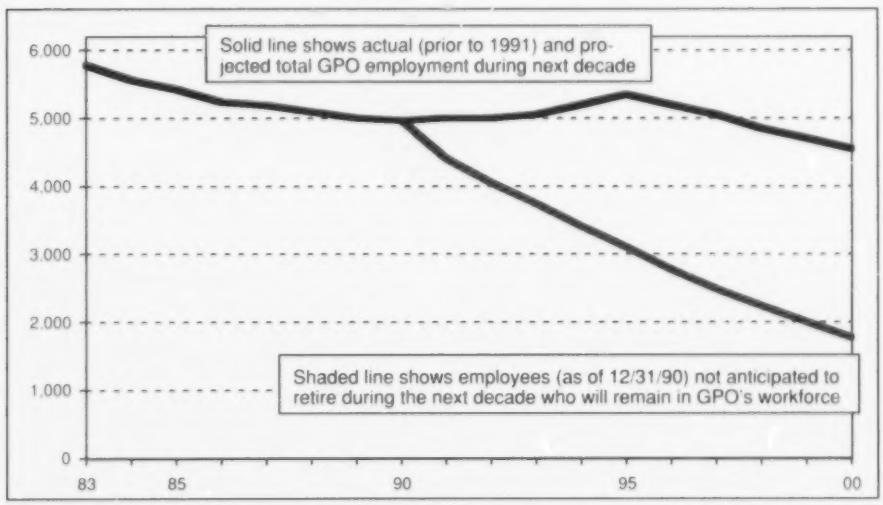

Figure 2. *Actual and projected GPO employment levels, end of each calendar year*

By the end of this decade, over 60% of GPO's workforce will have been with GPO for less than 10 years. And much of GPO's future workforce will require skills that differ from our current workforce in order to accommodate the change to electronic products and services.

While there can be no guarantees that preclude the use of alternate methods, it would appear that GPO can reshape its workforce to meet its mission without affecting the careers of our present employees adversely. Most likely, the majority of changes will be accomplished through targeted recruitment to replace employees as they retire. Mindful of the trends and demographics in studies such as *Workforce 2000*, GPO needs to employ a number of specific strategies in future years:

- ***GPO must recruit aggressively***, repositioning itself as a dynamic employer. We have an exciting future that candidates for positions need to understand and appreciate. These efforts will be needed to bring in place a diversity of skilled people for our future, including dedicated communication, computer, and information technologists who will help us reshape our products and services in the years ahead.
- ***Extensive training of GPO's present employees*** will provide them with the skills that will be needed to meet our future workload requirements.
- ***GPO must develop special skills in project team disciplines.*** Because of the impact of electronics on GPO's products and services, GPO will evolve from a dominant replicator of information to a dominant disseminator. Because of this evolution, our role will change, becoming more of a partner with our customers in helping them fulfill their needs to create and disseminate information products and services. This will require new skills in problem-solving and work-team management and participation.
- ***"All Sources" postings will be used widely in recruitment efforts for most GPO positions.*** During the past 15 years, facing both a declining workforce through attrition and a need to reduce total GPO employment, a closed system limiting postings to "GPO employees only" was necessary. Increasingly, this will no longer be practical. Both the replacement of much of our existing workforce that will retire in the next decade and the level and range of skills we will require mean that we must fill positions with the very best candidates from within and outside GPO.
- ***Our position classification system must be revised.*** In a future where project management and team skills will be predominant, and when new technological skills will become increasingly important, we must establish

a classification system that is both responsive to GPO's needs and reflective of the employment marketplace.

Changes also will be required in the compensation of GPO's workforce in order to attract and retain the best people and provide proper incentives for employee performance. These changes will be difficult, but they represent changes that capable people will demand. GPO must be ready to meet these demands.

As GPO drives forward in becoming a highly cost-competitive organization, our workforce must share in the savings that arise from these efforts. Fair compensation, incentives, and rewards, based upon the specific accomplishment of goals and objectives and performance-based productivity, are needed. Productivity and value are the fundamental determinants of compensation. Our compensation systems must reflect these vital elements.

These systems must be team-oriented. Without minimizing individual effort, it is our combined efforts that create value, and team efforts must be measured and rewarded. While individual rewards should not be precluded, rewards that inadvertently would encourage people or departments to work against each other have no place in GPO's future.

We also must anticipate that greater workplace flexibility will be demanded of GPO, no different than at any other major employer of the future. GPO must be prepared to meet these needs for flexibility in such areas as:

- shift and workweek schedules;
- exploration of feasible child-care alternatives;
- work-sharing arrangements;
- use of part-time employment to meet peak demands; and
- development of programs that allow employees to work at home.

All of these changes will be eased as GPO transforms itself in the years ahead from a more rigid traditional manufacturing operation to a more flexible electronic creator, replicator, and disseminator of information products and services.

Finally, dedicated people will demand even greater participation in operational decision-making. People who participate in such decision-making will be motivated to improve our operations, products, and services continually. We need to redefine our suggestion program as a meaningful, action- and results-oriented system. It is presently too bureaucratic with a long, involved process to submit, notify, evaluate, and implement. Our strength must be ideas that come forward rapidly and are implemented even more rapidly.

This first section has described one very basic principle of great importance to GPO's future—our talented workforce is, and will continue to be, our greatest source of strength. We must do everything we can to involve everyone, and listen and act on their suggestions for improvement if we wish to better our future.

Training

Significant progress already has been made in refocusing GPO's training efforts to provide people at GPO with the skills they will need in the coming years.

Empowerment is the key concept underlying our efforts to combine required and elective training, training designed to strengthen GPO's ability to deliver quality products and services, and training to prepare our workforce for our transition to electronic products and services. Our training efforts must be directed to place at the disposal of our workforce the power to gain the skills needed not only for current positions, but for the positions that will be key to the performance of GPO's mission in our future. We must employ a number of strategies in our training efforts:

- ***GPO must put in place facilities and instruction staff on-site*** that are appropriate to our needs and financial resources, augmented by training expertise outside GPO.
- ***Career development and counseling*** must be provided for all interested GPO personnel.
- ***Training must provide existing employees with new and necessary skills*** in the variety of disciplines essential to understanding and mastering the technologies to be employed in our future.
- ***Training must be available to all GPO employees on an equal basis.***
- ***GPO's personnel will be used as instructors,*** where feasible, to augment our internal training capabilities and best utilize the collective (and considerable) skills of our workforce.
- ***Training must provide certification of current skill levels, and the ability to acquire the skills needed for promotions,*** to the extent permissible, encouraging people to move through the ranks competitively.
- ***A Training Advisory Board will be established, providing participation in training efforts*** for all employees at GPO through involvement in course development, including active participation by GPO labor representatives.
- ***Training will be used in an innovative manner to assist disabled personnel in returning to active and rewarding work.***

In addition, GPO's Institute for Federal Printing and Publishing (IFPP) will be continued, providing training for GPO's Congressional and agency customers. Just as GPO's personnel need to be trained in the technologies of the future, our customers need to be aware of the impact these technologies will have on their efforts in meeting their information requirements. Training through IFPP will continue to be a principal method through which customer awareness of GPO's operations and services is built.

Products and Services

Because of our transition to electronic information technologies, many of GPO's products and services will undergo considerable change in the years ahead. These changes will impact both GPO's procurement of traditional print products and our in-house production operations.

The largest impact will be on GPO's procurement of traditional print products for Federal agencies. As Government information moves to electronic formats, as alternate methods for disseminating electronic formats increase, and as the use of print-on-demand technologies grows, the demand for the procurement of traditional print products will drop significantly.

Simultaneously, the demand for traditional print products produced in-house by GPO also will fall. Anticipating this reduction will require the consolidation of GPO's traditional print capacity around the ongoing needs for ***core Government information products and services.*** The key determinant of our production capabilities and capacity must be GPO's unique ability to best serve the specialized production requirements of Government while remaining cost-competitive in doing so.

GPO will deploy a number of product and service strategies:

- ***Electronic products and services, especially electronic dissemination of information, will be expanded.*** In concert with the needs of Congress, the CONGRESSIONAL RECORD must be available on-line by 1993. By 1996, the remainder of time-sensitive and research-oriented Congressional and other core Government information products and services similarly must be converted to electronic formats. And by the end of this decade, GPO must have in place an electronic dissemination network capable of serving the needs of the Federal Government, depository libraries, and Government information users.
- ***Print-on-demand technology increasingly will be used*** to allow for the economical printing of small quantities, reduce the physical storage of

print materials, and allow the expedient and cost-effective delivery of information to users, including new and previously unavailable custom products such as large type editions of documents.

- ***Standards for electronic products and services will be developed*** in participation with Congressional and agency customers, information users, and various standard-setting organizations. Such standards must leave customers free to create their information to serve their own needs, but assure that the resultant information fits an electronic dissemination capability that reaches libraries, other Government facilities, and information users, with common user-friendly interfaces.
- ***Print products also will be standardized.*** The redesign of GPO's in-house production capacity around core Government information products and services, combined with the changes caused by the Government's conversion to the metric system, will afford us the opportunity to introduce a number of standard print formats and sizes that will optimize the production

Core Government information products and services

GPO/2001 calls for GPO to replace existing equipment with modern, efficient equipment designed to fulfill unique production needs, while reducing our in-house production capacity to boost the utilization rates of the equipment we employ. Both of these strategies are designed to assist GPO in becoming more cost-effective in delivering products and services.

The overriding principle will be to design GPO's in-house production capacity around the ongoing needs for the production of core Government information.

In content, core Government information products and services are those that are basic and essential to the ongoing functioning of the Federal Government. In format, they are the information products and services most desired to be accessible in electronic formats. Core Government information includes:

- the CONGRESSIONAL RECORD;
- bills, resolutions, and amendments;
- committee hearings, reports, prints, and documents;
- the FEDERAL REGISTER;
- the *Code of Federal Regulations;*
- the *United States Code* and supplements;
- the *Budget of the United States Government;*
- key statistical abstracts and indices; and
- other Congressional and key Executive and Judicial branch publications.

Building GPO's in-house production capacity around these products and services with modern, efficient equipment will allow significant consolidation of our present production capacity. The resulting higher productivity and utilization rates, combined with a concerted effort to make optimum use of standard print formats and sizes in partnership with Congressional and agency customers, will allow GPO to become a more efficient production facility.

While not precluding the procurement of core Government information products and services, the balance of Federal printing will be procured commercially. However, some work that is particularly well-suited to GPO's redesigned production capabilities will remain or be brought in-house.

Decisions to bring such work in-house will be based on a comparison of GPO's total costs, including economic costs such as idle time, to total commercial procurement costs. As a result, the Government will be assured of receiving the highest value for its information products and services.

The metric system and its standards for print products

The conversion to the metric system by the Federal Government, as required by law, may require changes in the present sizes of a wide variety of Government publications. The two standard metric print product sizes are the A4 (approximately equivalent to 8.3" x 11.7") and the A5 (approximately 5.8" x 8.3"). GPO will refer to these two standards as full metric book size and half metric book size.

The use of these full and half metric book sizes will allow GPO to optimize our equipment configurations and offer Congressional and agency customers the most cost-efficient print products. For example, a press set up to produce 32-page signatures at full metric book size also will be configured to produce 64-page signatures at half metric size without time-consuming changeover procedures.

capabilities of our equipment and processes. The cost savings available to Congressional and agency customers from selecting these standard product offerings will be significant, often achieving reductions of 30% or more from customized product costs, aiding the Government in controlling its traditional print costs.

- ***Increased information will be provided to Congressional and agency customers about their information product and service activities.*** With standardization and systems automation, customers will be provided with constant updates on order changes and their effects and costs, reducing customer uncertainty and building greater reliance into both in-house production and private sector procurement. Additional improvements also will be made to our contract administration and compliance systems.

The key task of GPO in the years ahead must be to put in place the proper range of electronic dissemination capabilities to serve Congress, agency customers, depository libraries, and Government information users. Any lesser goal will keep GPO from fulfilling its mission to create, replicate, and disseminate information products and services that meet the needs of our customers in a cost-effective and efficient manner.

GPO also must develop new partnerships with our Congressional and agency customers, taking on the role of joint creator (but not author) of information products and services. This partnership will require a closer alignment of GPO with our customers—an energetic, assisting posture, very different from GPO's past role as a traditional production facility. It will require that GPO discipline itself into teams of expert problem-solvers working in partnership with our customers to create information products and services in their optimum and most cost-effective print and electronic forms.

Through these newfound partnerships with Congressional and agency customers, ***every product and service must be reinvented, not just once, but continually*** in

a constant effort to improve the accessibility and usefulness of information products and services at the optimum combination of value and cost.

To reinvent products and services continually, taking the fullest advantage of the expanding range of print and electronic options, ***GPO needs to develop and implement Product Improvement Teams.*** These will be multi-disciplined teams consisting of members from every level of GPO who will come together for short periods of time with assignments to engineer improvements to specific aspects of our products and services.

As the initial dissemination of information migrates to electronic formats, ***the opportunities for rethinking and consolidating traditional print products will multiply.*** Many products will remain in traditional print formats; others will not. For those that do, print formats often will change from an expediently delivered product (which was the case when print was the only available format) to a reference tool, augmenting the information first made available in electronic form. The multiplicity of options that will become available will open new avenues for achieving flexibility and cost-efficiency in print.

Finally, ***Congressional and agency customers will look to GPO to assist in setting and adopting a range of standards for the electronic creation and dissemination of information products and services.*** GPO must meet the demand for standardization not by forcing our customers to conform to a single system, but by providing a range of standards that will allow electronic data to be converted into common user formats that can be accessed easily by information users. Such standards will allow our customers to expend their limited budgets on systems that best serve their needs, instead of having to build individual user interfaces (which would proliferate quickly and confuse information users).

Technology

Two strategies will determine our acquisition of technology in the coming years:

- ***We will consolidate our traditional print capacity to meet the product and service needs that are both most appropriate to our mission and cost-efficient.***
- ***We will expand our electronic product and service capabilities.***

GPO's equipment and technology acquisitions will be centered around the activities of information creation, replication, and dissemination, as well as the automation

of our administrative and support activities. Six technology principles will apply universally:

- ***Off-the-shelf, or industry-standard, technology will be employed wherever possible.***
- When we must develop unique systems or participate in establishing new standards, ***we will work to develop comprehensive systems and standards*** that others also will want to adopt.
- ***GPO's technological capabilities in electronic creation, replication, and dissemination will be extended as far as possible,*** pushing the technology to its broadest applications.
- ***Automation and simplification will be used to increase productivity and reduce, wherever possible, the total workforce required by GPO to meet our mission.*** To the extent possible, workforce reductions will be accomplished through retirement-based attrition.
- In addition to meeting the express needs of our customers, ***standard products and services will be offered to fit the needs of our customers and the technology and equipment available,*** with the goal of providing our customers with the opportunity to reduce their costs and improve value.
- ***Equipment utilization rates will be optimized through the consolidation of in-house production capacity.***

These basic principles will affect how GPO creates, replicates, and disseminates information products and services, and how we automate our administrative and support activities, in a number of ways.

Creation

Creation is the process of developing (but not authoring) the perfect file from which electronic dissemination can be made, or that first perfect image from which we then can replicate copies, either in electronic or print form.

Fulfilling GPO's role in the information creation process will require that we work closely with Congress and agency customers to help them best meet their needs. It also will require that we involve our Sales and Depository Library Programs earlier in the creation process to ensure that the dissemination of information products and services is accomplished as efficiently as possible, and that the task of information users is made as easy as possible.

Our role in the creation process will require that we adopt open system architectures wherever possible. Two key standards already supported are Standard Generalized

Mark-up Language (SGML) and variations thereof, and PostScript®. Others will be researched aggressively and adopted in concert with the needs of our customers.

GPO's closed architecture ATEX systems are already being replaced by open system architectures of PC's, VAX servers, and open networks. Where off-the-shelf products will not serve our needs well, such as for an electronic CONGRESSIONAL RECORD, we must develop the best possible systems to meet the needs of our customers. Key among these developments must be user-friendly interfaces. People intuitively know how to access and use printed documents. We must strive to make access to, and the use of, electronic documents just as easy.

In partnership with our customers, our goal must be to convert the information we handle to an electronic creation process. Duplicative creation efforts—where the author and agency staff create information only to have it recreated by GPO—must be eliminated. In order to accomplish this, we will follow these strategies:

- ***GPO will assist Congressional and agency customers in the development of seamless, integrated authoring systems. These systems must be user-friendly and simplified in their use, utilizing off-the-shelf technology wherever possible.***
- ***GPO will help develop procedures and electronic protocols for the approval and electronic transmittal of information that mirror the present paper trails which form the legal basis for many documents.***
- ***Simplified and automated conversion procedures will be created by GPO to allow the easy and accurate movement of information along each step of the creation, replication, and dissemination process.***

In addition to these strategies, GPO will work to standardize the creation process to meet the needs of the information author and manager. All parts of our creation process will be subjected to a continuous process of improvement with specific goals for reductions in process costs established and met each year. Processing and conversion capacities will be monitored on a continual basis to ensure the highest possible utilization rates. Where utilization falls, consolidation will be used to boost utilization and minimize cost increases to our customers.

Replication

Replication is the process of reproducing duplicate copies, either in electronic or print form, from created images or files.

Because traditional print formats will continue to be a primary information medium in the near future, in many cases information replication will continue to

require multiple copies. Increasingly, however, replication of some information products and services may require that only a small number of copies are produced through the use of print-on-demand technologies.

As with the creation process, the effective management of information replication will require that we work closely with our Congressional and agency customers and our Sales and Depository Library Programs to help them best meet their needs. It also will require that we work closely with information users, as well as the private information industry, to ensure that the needs of information users are met as cost-effectively and efficiently as possible.

Information replication will be improved through the increased use of open system architectures. Because of our adoption of a range of standards in the creation of information products and services, it should be a reasonably simple process to develop and implement similar standards in the print-on-demand replication of information, as well as for the replication of information in electronic formats such as tapes, disks, and CD-ROM's. Wherever possible, off-the-shelf software engines for search and retrieval, database manipulation, and text processing will be utilized.

For traditional print products, GPO must adopt cost-efficient industry standards for sizes, bindings, and materials wherever possible. This will allow us to employ the broadest range of competitive technology, equipment, and materials, reducing costs and maximizing equipment utilization rates.

Working with our customers to manufacture traditional print products around standard equipment configurations will allow GPO to put in place significantly fewer pieces of equipment than would be needed otherwise. It also will allow GPO to run this equipment more efficiently around the clock, helping change GPO from an individual job-based manufacturing facility to a more economical process-based manufacturing facility where like jobs can be handled in an optimum and continual stream of activity.

Having fewer pieces of equipment will allow GPO to move manufacturing steps closer together, consolidate and simplify operations, lower our space requirements, reduce time in production, facilitate communications, and ease materials handling needs.

In addition, GPO must push the technology of electronic xerographic duplication as far as possible in the future. While print-on-demand technologies will be used for the economical replication of infrequently requested documents, we must do more with this technology. We must use it to meet a customer's immediate delivery needs whenever economically practical, allowing traditional print manufacturing to

become a cost-effective, managed process that is less vulnerable to the peaks and valleys of demand. We must do this by working closely with both sides of the customer equation—the information author/creator and the information user—to determine how we can meet their needs, on a practical basis, through print-on-demand technologies wherever possible.

Automation of activities closely related to replication—such as process/quality control and materials management and handling—also must be undertaken and implemented to the fullest extent. As GPO consolidates its replication operations, careful thought must go into eliminating materials movement and other potentially duplicative efforts that do not add value to each product and service. As near as possible, our goal must be to engineer every step of the replication process with maximum efficiency, eliminating those steps that do not add to the value of our products and services.

Dissemination

Dissemination is the process of getting the information needed by information users into their hands at the time it is required.

Electronic replication and dissemination of information continue to become less and less expensive, while their advantages in access and use—especially for large, complex data sets—continue to increase. At the same time, the replication and dissemination of printed information continue to become more expensive as a result of increasing materials, production, storage, and shipment costs. It is clear that electronic dissemination will not, in the immediate future, approach the same economies of scale as offered by mass production of information in traditional print formats. However, it also is clear that electronic dissemination will offer many cost-efficient alternatives to print, allowing the overall costs of our efforts to decline in real dollars in future years.

More than any other part of the information process, dissemination will require that GPO work closely with our Congressional and agency customers to help them best meet their needs. Additionally, we must integrate their needs with those of information users in our Sales and Depository Library Programs.

Information dissemination by GPO will occur in three basic formats: electronic, print-on-demand, and traditional print products. ***Working in partnership with our customers, GPO must have the majority of our information products and services that are suitable for electronic dissemination available in electronic***

formats by the end of this decade. There will be multiple forms of electronic dissemination, including:

- ***a satellite dissemination of information on at least a daily basis*** to depository libraries and other subscribers to this service;
- ***an interactive network allowing electronic access to the full information database, including downloading capabilities;*** and
- ***electronic on-demand products including tapes, disks, and eventually, even CD-ROM's,*** which will be used in lieu of downloading capabilities when a significant amount of information may be required, or where the user identifies the products and formats desired.

Each of these is discussed in greater depth beginning on page 35 under *Dissemination activities.*

Cost-effective and efficient information dissemination also will require that we adopt open system architectures to ease access to, and use of, Government information products and services. Because of GPO's planned adoption of a range of standards for the creation of information products and services, it will be a reasonably simple process to adopt similar standards in the electronic dissemination of information. In concert with our technology objectives, off-the-shelf software for search and retrieval, database manipulation, and text processing will be utilized.

Where off-the-shelf technology is not available or suitable to specific dissemination tasks, our focus must be on the development of comprehensive systems with special attention directed to user-friendly interfaces that intuitively are easy to use.

Technology must be used as a unifying factor to standardize information products and services in the coming years. One of the most important elements of an electronic database of Government information products and services will be common interfaces that information users can manipulate easily to view the information desired without having to learn several hundred different interfaces, each specific to a different database.

While remote access to databases through GPO must be supported, there are a number of problems that are peculiar to remote access, including:

- higher costs, as information users must access a common GPO system only to have the GPO system then access the remote database system;
- delays in response time for the same reasons; and
- myriad system interfaces and differences in use and compatibility with existing off-the-shelf software tools.

These problems can be minimized through the construction of a common on-line database of Government information products and services. ***Indeed, the most efficient electronic network can be created by a combination of remote access to some databases and the porting of others to GPO on a regular basis and, in partnership with the creator/customer, converting these into common formats in a single database that would provide unified tools for access and use.*** Such a common database would:

- concentrate optimum utilization onto a single system, thereby achieving lower access costs;
- eliminate the added costs for many agencies to build remote access engines, and avoid commensurate degradations in performance that would otherwise occur;
- simplify access and use by presenting common user interfaces, common data formats, and unified tools for access and use; and
- free remote agency systems to best serve their internal needs, and eliminate security concerns on systems used for purposes other than dissemination, while at the same time assuring reasonable access to Government information products and services in electronic formats.

Administrative and support activities

These activities ***support*** GPO's creation, replication, and dissemination of information products and services. They include functions such as accounting, personnel, production scheduling, maintenance, materials handling, and purchasing. To realize GPO's mission successfully in the future, these activities must be automated.

Open system architectures must be implemented wherever possible, and simplified procedures must be stressed. Administrative and support activities, while essential, do not add significant tangible value to the products and services we deliver. However, they are necessary support activities that must be performed by any large organization engaged in production processes. The key, therefore, is to perform them as simply, inexpensively, and quickly as possible. Expenditures in these support activities must be minimized to allow the highest value to be realized by customers of GPO's products and services.

Automation of administrative and support activities will lower overhead costs and section burdens, reducing the costs of our products and services. Today, as much as 40% of GPO's total payroll dollars are spent for administrative and support activities. Through a program of system and procedural simplification, automation, and

System simplification and Continual Quality Improvement

While automation will be one key to simplifying GPO's systems and procedures, particularly in our administrative and support activities, system simplification also is essential. We have let too many things get too complicated.

Everywhere we look there is another system, many of them duplicating parts of other systems, but no single system doing the entire job. Many of these were put in place when something went wrong, as a way of ensuring the same thing would not happen again. But ours is a human business, and mistakes will occur. The cost of building systems and procedures that try to ensure that mistakes will not happen often makes "the cure more expensive than the disease." Having learned this lesson, we must put it into action, pursuing simplification with a vengeance.

While mistakes may occur, however, simplification for the sake of saving money on the "cure" is not an excuse for allowing mistakes to happen. The key to avoiding mistakes is CQI, or Continual Quality Improvement. GPO must put in place a system of total quality management which ensures that all employees at GPO recognize their roles in the entirety of GPO's mission, and bring the highest quality to their performance.

productivity improvements, our goal must be to achieve significant reductions in our administrative and support costs.

Finally, to ensure that GPO is as responsive as possible to technology modernization needs, our capital investment program is being enhanced by an ongoing, integrated, semi-annual equipment and technology review of all GPO areas. This program also has implemented procedures to focus and base decisions on in-depth analysis, including return on investment and cost/benefit determinations. This review process will ensure active management involvement on a regular basis in the efforts to modernize GPO, and encourage participation at all levels of GPO.

Organizational Structure

As significantly as GPO's workforce, training, products and services, technology, financial management, facilities, and dissemination activities may change, the truly significant changes will occur in GPO's organizational structure. These changes will empower the other changes envisioned in our future.

To change GPO into an organization that will empower us to accomplish our mission in the electronic information era, several strategies need to be deployed:

- ***GPO must change from a function-based organization to a flexible, customer-based organization.*** The key to accomplishing this will be the creation of a more fluid, integrated structure.
- ***GPO's in-house production capacity must be consolidated around the needs for core Government information products and services with as little excess capacity as possible.*** Any excess capacity should be filled with work brought in-house only if GPO's total costs, including economic costs

such as idle time, compare favorably with the total costs of commercial procurement.

- ***The costs of our administrative and support activities must be reduced.*** Wherever appropriate, they must be placed on a cost-competitive basis with outside vendors of the same services, forcing these activities to become self-sufficient.
- ***GPO's organizational structure must be simplified.*** Both the number of supervisors and the layers of supervisory control need to be reduced. We must move decision-making authority and flexibility as close to the actual work as possible.
- ***A number of functions presently treated as separate entities, such as quality control and information resource services, must be integrated effectively throughout GPO's organization.***

Like most printing organizations, GPO is organized by functions, such as typesetting, printing, binding, and distribution. While these can be effective structures in a traditional manufacturing operation, they will not be an effective means of organizing GPO as an integrated information-processing organization. We need to establish a customer-based organization whose activities are targeted at the development of sophisticated multiple-format and multiple-use information products and services.

The organizational structure that GPO needs to build is shown in Figure 3 at the top of the next page. There are several things about this organizational structure that are distinctly different from the current GPO structure:

- The structure has been turned upside down from the manner in which organization charts typically are presented. To make it clear that the needs of our customers must drive GPO, our customers have been placed at the top of the new structure.
- The entire organization has been integrated closely. Instead of discrete and separate organizational boxes with carefully defined upward and downward links, each area of the new structure is connected directly to its related areas. This depicts the teams, working closely with customers, that will be needed to create, replicate, and disseminate the information products and services required by our customers.
- Administrative and support activities, which normally are placed at the top of organizational pyramids, have been placed at the bottom, making it clear that the role of these activities is to support—not control—the customer-driven activities that produce GPO's revenues.

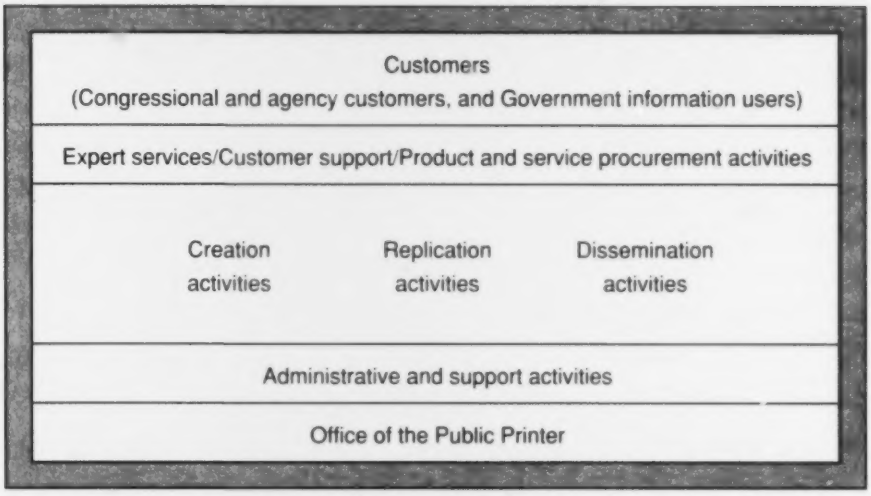

Figure 3. *Projected GPO organizational structure*

In the structure presented in Figure 3, directly below the ***customers*** are our ***expert services, customer support, and product and service procurement activities.*** We anticipate that expert services will be one of the fastest growing segments of GPO. This area will employ technical personnel who will represent the entirety of GPO's expertise. This group of technologists will work closely with both our customers and our internal product and service activities, interfacing with each to develop the optimum combination of creation, replication, and dissemination capabilities for each information product and service.

In the newly structured GPO, our product and service procurement activities will be integrated with customer support activities and expert services. Continuing changes in information technology will require a much closer alignment between these procurement activities and our customers than has existed previously.

Immediately below expert services, customer support, and product and service procurement activities is a group of three related areas—our internal ***creation, replication, and dissemination activities.*** While these activities previously have been performed in a linear fashion, representing a logical flow of information through these steps, there will be no traditional boundaries between them in our new structure. The absence of such boundaries is purposeful, indicating the flexible and fluid structure of all three activities.

GPO's present production divisions will be consolidated within the new creation, replication, and dissemination activities. All three of these activities will be tied

directly to our expert services, customer support, and product and service procurement activities, indicating that any combination of these services can and will be used in support of our Congressional and agency customers.

The next group represents GPO's ***administrative and support activities***. The purpose of these activities is to ***support*** the activities above them in the new organizational structure, providing the necessary services our revenue-producing activities require in order to perform their tasks efficiently and effectively. It is not the role of administrative and support activities to control GPO's revenue-producing activities. While these activities provide guidance, management, and leadership, their role is to remove obstacles that prevent our revenue-producing activities from operating at their peak performance levels.

Our administrative and support activities need to be reduced systematically with clearly defined goals for their reduction delineated and achieved every year. A managed program consisting of defined goals and measured results is the only solution that effectively will lower the administrative and support overhead placed on GPO's

Focus on regional operations

While the specific strategies embodied in GPO/2001 will apply equally to our regional printing and procurement operations, there are several strategies that are pertinent to our regional operations which need to be emphasized separately:

- Because of the geographical dispersion of our customer base and the technological changes occurring in the creation, replication, and dissemination of information products and services, it is essential that expert services are added to our regional operations to assist all customers with the advances in information technology that lie ahead.
- As the process of creation and dissemination becomes increasingly seamless, satellite operations—similar to the remote operations center recently opened by GPO at the Federal Aviation Administration facility in Atlantic City, NJ—will be established in cooperation with customers to support specific information activities.
- Anticipated reductions in traditional print procurement activity will have a mixed impact on our regional procurement operations. Overall, the number of field procurement personnel can be expected to be reduced commensurate with this reduction in procurement activity. In some cases, this will result in smaller procurement offices; in others, it will result in the need to close offices, especially those that have been tied directly to a local procurement need that experiences a significant decline. In still other cases, to be close to customers, there may be a need to open new satellite offices. In the aggregate, however, the number of procurement offices likely will decline.
- There will be a significant consolidation of our regional printing plant operations. Because of the anticipated reduction in demand for traditional print products, as few as one or two regional plants will remain, each strategically located to serve the broadest geographical dispersion of customers.
- Commensurate with the increased use of print-on-demand technology, xerographic duplicating capabilities—as well as increased procurement of print-on-demand services—will occur throughout our regional locations, most often in concert with specialized customer needs.

revenue-producing activities, an objective that must be realized as we transform GPO into a cost-competitive organization.

To accomplish this objective, we first must clarify the need for those administrative and support activities that GPO must provide. We then must ensure that all necessary administrative and support activities become competitively sound. To do this, we need to divide these necessary administrative and support activities into three groups:

- First are the ***administrative and support activities which can be supported through chargebacks at cost-competitive rates, allowing these activities to be self-sufficient.*** The bulk of our administrative and support activities, such as Engineering Services, will fall into this group. By allowing GPO operations to buy competitively if an outside vendor offers a lower combination of cost and value, these activities will have to become cost-competitive or face elimination in favor of procurement, ensuring that the lowest costs are realized for GPO and our customers.
- Next are those ***activities that will be required, but may not be supportable through a chargeback system.*** An example of this might be Building Services, used by all areas. These activities still must be placed on a cost-competitive basis by competing with outside vendors for the same quality and quantity of work.
- Last, there is the occasional ***activity that is required, but which cannot be made self-sufficient or necessarily cost-competitive.*** These must be segregated from overhead allocations and placed on an annual appropriated funds basis instead of recovered as a component of costs, as we drive GPO forward to become cost-competitive.

Finally, at the very bottom of GPO's organizational structure will be the activities of the ***Office of the Public Printer,*** consisting of the offices of the Public Printer; Congressional, Legislative, and Public Affairs; General Counsel; Administrative Law Judge; and Inspector General. As with other administrative activities, it is the role of these offices to lead and support our revenue-producing activities in meeting GPO's mission as effectively as possible.

There are as many as eight layers of management and supervision separating the Public Printer from revenue-generating personnel today. As we rebuild our organizational structure, the number of layers between employees and management must be reduced systematically.

Decision-making authority, flexibility, and responsibility must be moved down in the organization. While some mistakes will occur because of this, we must recognize that mistakes were not being prevented through a complex system of approvals and verifications that stripped authority and responsibility from the people producing GPO's products and services. With financial responsibility and rewards tied directly to performance, proper decisions increasingly will become clear at all levels throughout GPO.

To complete our organizational strategies, a number of functions currently established as distinct organizations must be reexamined. An example of this is our Office of Information Resources Management (OIRM). A separate OIRM organization made sense in an environment of centralized mainframes. Today, however, distributed processing and local area networks are eliminating the need to segregate this strength from the areas that require its expertise regularly. Support functions like OIRM need to be examined carefully to determine what level of integration into the entirety of GPO can be accomplished to better serve our operations.

Financial Resources

A major premise of GPO's strategic planning effort is that the majority of the financial resources to achieve our goals and objectives should be supplied by GPO without significant increases in appropriated funds.

Funding of capital expenditures for technology, facilities, and equipment should come from GPO's revolving fund based on the optimum deployment of all GPO assets, including certain real estate holdings and surplus equipment which would become available for sale in the successful consolidation of GPO in future years. Combined with improved working capital management and the possible use of time financing for certain building-related costs, GPO's revolving fund and other assets should be sufficient to execute much of GPO's strategic vision.

While the underlying assumption of GPO's financial plan is that additional appropriations will not be required for modernization, limited additional appropriations will be required in the short-term (1993-96) for certain non-recoverable sums to be expended on non-capital items, such as temporary increases in personnel. These additional appropriations will be necessary to allow GPO to continue the production of traditional print products and services while making the transition to electronic products and services. A conceptual approximation of GPO's appropriation requirements is shown in Figure 4 at the top of the next page.

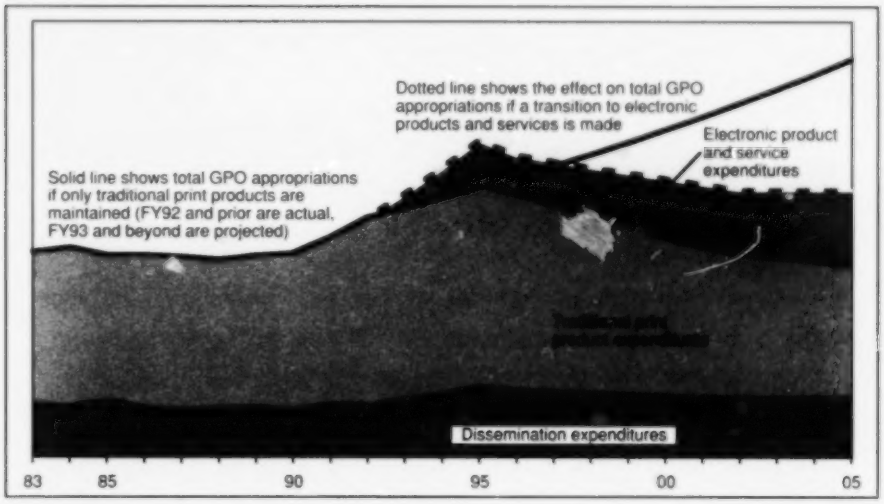
Dotted line shows the effect on total GPO appropriations if a transition to electronic products and services is made
Electronic product and service expenditures
Solid line shows total GPO appropriations if only traditional print products are maintained (FY92 and prior are actual, FY93 and beyond are projected)
Dissemination expenditures
83
85
90
95
00
05

Figure 4. *Projected long-term relative effects of transition to electronic products and services on GPO appropriations*

Figure 4 illustrates that the past decade has seen relatively stable appropriations (measured in current dollars, unadjusted for inflation) for both Congressional printing and binding (CP&B) and the salaries and expenses of the Superintendent of Documents (S&E). This stability was achieved through a variety of factors:

- Total GPO employment declined during the last decade by 26.7%, from 6,891 in 1980 to 5,049 in 1990, a reduction averaging 3.1% annually.
- Our internal value-added productivity (measured as revenues less the costs of purchased printing, paper, materials, and supplies, divided by total employment to calculate productivity per employee; unadjusted for inflation) rose by 59.5%, from $40,764 in 1980 to $65,023 in 1990, an increase averaging 4.8% annually. This increase offset a similar rise of 4.7% annually in average GPO employee wages during the same period. Both of these trends, which are illustrated in Figure 5 at the bottom of the next page, contributed to an average unit cost ***decrease*** for Congressional printing of 0.4% annually during the past decade.
- The annual printing workload from Congress declined by 12.2% over the last decade, a reduction averaging 1.3% annually.

GPO's net rate of attrition has slowed during recent years. Further attrition to GPO's workforce would impair our ability to perform GPO's mission, and no longer can be depended upon to help achieve the overall cost stability of GPO in the years ahead. As a result, while productivity gains still will occur, the net cost of traditional GPO

print products—absent substantial changes in their format and content—must be expected to grow at an average rate of approximately 4.0% yearly, about the same as the average projected rate of inflation. The projected total appropriations required in future years—if a transition to electronic products and services is ***not*** made—are shown by the solid line in Figure 4, which illustrates this relatively constant upward incline in costs.

Workload reductions from Congress already have been substantial during the past decade, both in number of pages processed and final quantities printed. While some minor reductions still may be possible, it also is unlikely they will be sufficient to halt the overall cost increases in traditional print products projected in Figure 4.

However, ***a transition to electronic products and services—accompanied by an aggressive effort to reinvent, reexamine, and redesign traditional print products—would allow considerable savings over the projected costs of traditional print products to be realized.*** This is illustrated by the dotted line in Figure 4, which shows the combined future appropriations required for electronic and traditional print products and services, and dissemination activities.

While there will be a requirement for additional appropriations in the short-term to support multiple formats, the projected savings from the transition to electronic products and services will be substantial. A variety of factors could then be expected

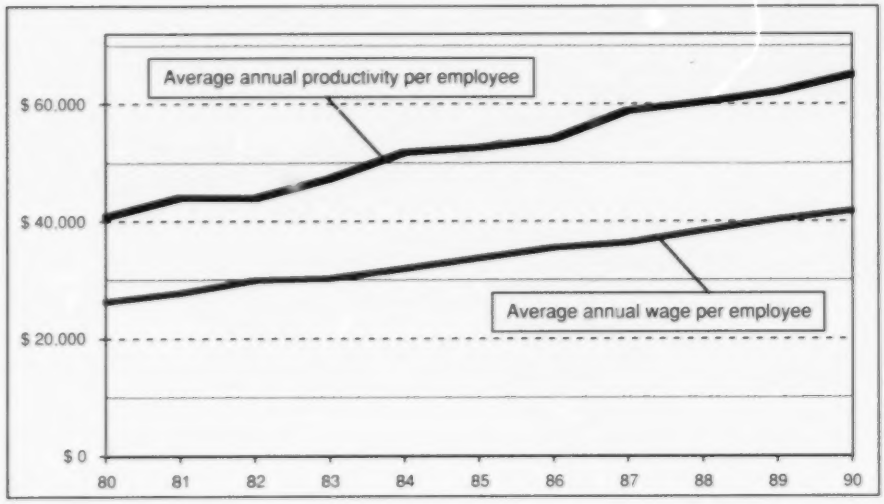

Figure 5. *Comparative growth in GPO wages and productivity per employee*

to converge, once again producing stability in the cost of Congressional and other information products and services:

- Despite the need for a short-term increase in appropriations in 1993-96, some reduction in overall GPO employment from its present level of approximately 5,000 to about 4,500 will occur. This reduction can be accomplished only through the transition to electronic products and services.
- The print replication process will be phased out for some products. While print will not disappear, it will be possible through electronic products and services to disseminate needed information quickly, and subsequently replicate those print products that are needed in a more cost-effective manner with extended delivery schedules.
- The costs of electronic creation, replication, and dissemination can be expected to continue to decline.
- A variety of means, including traditional print, print-on-demand, and assorted electronic information technologies, will be used to minimize the total delivery costs of products and services.

A number of additional financial strategies also will be deployed by GPO:

- ***An aggressive effort to better manage our working capital assets***, such as receivables and inventories, will result in a reduction of our working capital cycle and needs, increasing the cash portion of GPO's revolving fund available for capital improvements to equipment and facilities.
- ***GPO must change its methods of recovering costs.*** Instead of continuing to employ all-inclusive average rates and standard percentages, we need to establish fee-based pricing schedules specific to required services.
- ***Fundamental changes to our pricing methods must be made*** to change GPO from an actual cost pricing structure to an expected cost, or customer-based, pricing structure.

GPO currently uses an actual cost system. However, this system reflects what things actually cost on an historical basis, and not what they should cost on a current basis. In contrast, there are a number of advantages to an expected cost system:

- By carefully segregating and measuring idle time, as well as waste and spoilage, an expected cost system will enable us to focus our efforts on the management of these crucial factors in our operations.
- It will charge properly for forced idle time and excess capacity, as well as any special services that are required separately.

- It will facilitate our change to accurate, advance, firm estimates and cost updates as changes occur, and will speed billing to customers.
- It will not penalize optimum utilization.

We also must change to pricing conventions that are customer-based. Prices must be expressed in units that customers relate to their own organizations and needs. We must adapt to our customers. Our pricing conventions need to reflect a fixed cost to create the first unit(s), a second fixed cost to replicate the first copy(ies), and a variable cost for replicating multiple copies thereafter. Surcharges need to be determined accurately to reflect the added costs of providing varying service levels, and customers need to be advised so that they can make their decisions on a fully informed basis, understanding the cost implications of their alternatives.

Price reductions for optional work performed by customers also must be determined so that they can make informed decisions to participate in portions of GPO's creation process and save vital budget dollars. Costs for crews and equipment kept standing idle—in a state of readiness, such as on weekends—must be charged in full to customers, and not averaged in with other costs.

A fee-based pricing schedule that correctly portrays the costs of various services required by customers, expressed in customer terminology and units wherever possible, and augmented with accounting and management reports

Measuring results

As we redesign our systems to measure results, we must identify our critical success factors, tangible customer units, and tangible business units.

Each area of GPO needs to identify, and continuously monitor, the several factors that critically determine their performance. Every organization and function have such critical factors. Often, they are units of output, quality of product, and timeliness of delivery. For some, they are units of input measuring the incoming flow of work. We need to track these critical factors in each area and use them to monitor, adjust, and improve our performance continuously.

Similarly, GPO needs to isolate the services we perform for our customers as tangible customer units. These express the products and services in terminology useful to our customers. In some cases, such as the price of a publication, the unit is obvious. In others, the unit is not as obvious and will require considerable interaction with our customers to determine. Once identified, the cost of these units must be monitored accurately. Efforts need to be concentrated on reducing the costs of these units through a constant program of reinvention and product and service improvement in partnership with our customers.

Finally, GPO needs to make the same determination of tangible business units for our internal administrative and support activities. We need to know that it costs *x* dollars to process a personnel action, to process a job order, or to process a procurement action. And we need to track these costs accurately, continually improving our processes until the costs of these tangible business units are the lowest possible that can be paid for the activities they represent.

Only by identifying, measuring, and constantly improving our critical success factors, tangible customer units, and tangible business units in all areas of our organization, will we succeed in our goal of making GPO truly cost-competitive.

that provide customers with a clear picture of their activity, is the solution we must implement.

Another example of the improvements a fee-based pricing schedule will bring can be found in our procurement operations, where we use percentage fees to recover the cost of services rendered. Subject to minimums and a cap, these fees recover the cost of our procurement operations as a whole. However, because these fees average all services together, some services are under-recovered while others are over-recovered. Instead, we need to examine each service provided closely, and cost and price each one separately so that customers properly pay for each quantifiable service rendered.

Without these changes, customers will find GPO to be non-competitive in a variety of products and services where, in fact, we are competitive. Our pricing methods must not distort our competitiveness. Additionally, they must be altered to a user-friendly system that provides customers with clearer choices and an ability to see the true consequences of their decisions.

Facilities

GPO's present central office facilities are reasonably well-suited to traditional print technologies. However, GPO's Washington, DC, area operations occupy a considerable amount of space, consisting of more than 1.5 million square feet at the central office complex, with another 700,000 square feet of space rented in the metropolitan area—a total of over 2.2 million square feet. This amount of space is excessive to GPO's planned consolidation of traditional print operations and our transition to electronic products and services.

While a number of possibilities exist for the optimum use of GPO's buildings and land, the best solution appears to be the construction of a new facility for GPO on the land GPO is acquiring next to our present facility. A preliminary calculation indicates that a building of about 900,000 square feet, plus underground parking facilities, could be constructed to house the majority of GPO's central operations.

Our current Building 1 (completed in 1903, consisting of approximately 500,000 square feet) and Building 2 (1930, 240,000 square feet) would be retained. These buildings—GPO's oldest and most historic structures—would be bridged to the new structure, satisfying the balance of GPO's space needs.

GPO's existing Building 3 (1940, 600,000 square feet) and our Building 4 warehouse (1938, 160,000 square feet) would be sold, along with our existing parking

areas, so that construction of a new facility reasonably could be expected to be a self-funded project.

Under this planned use of GPO's real estate holdings, GPO will deploy a number of strategies:

- ***An appropriate new facility will be designed.***
- ***Buildings 1 and 2 will be renovated to allow their proper functioning as part of an integrated new facility.***
- ***As many administrative and light manufacturing operations as possible will be moved into Buildings 1 and 2 to consolidate space prior to the construction of a new facility.***
- ***Union Center Plaza personnel will be relocated to the central office complex by 1994.***
- ***To the maximum extent possible, all other Washington, DC, area operations will be relocated to the central office complex.***
- ***Projects to renovate or improve Buildings 3 or 4 will be curtailed during the development and construction of the new facility, except those that are vital to the safety and integrity of these structures.***

There are other options to consider that might optimize the value and use of our real estate holdings:

- The land presently being acquired could be sold, and the proceeds used to renovate Buildings 1, 2, 3, and 4. A preliminary evaluation indicates, however, that the proceeds of such a sale would not be sufficient to allow a full renovation of the existing structures. Moreover, barring the construction of a separate parking facility to serve GPO, this option would require that existing open land areas be retained for parking. Any construction of a parking facility would further deplete the proceeds of such a sale.
- GPO could be relocated, and its existing real estate holdings sold. While this is an option, it may not be desirable. Relocation of GPO would move us further away from Congress and the agency customers we serve.
- Building 3, which is the strongest load-bearing building on GPO's site, could be extended, and a parking facility added. Buildings 1, 2, and 4, and the land we are acquiring presently would be sold. However, a preliminary evaluation shows that because of the historic nature of Building 1, its inclusion in such a sale would bring lower proceeds than would be required to renovate and extend Building 3. In addition, a parking extension would

result in insufficient space to allow GPO to bring our local area satellite operations back into the District of Columbia.

Each of these options will continue to be evaluated in the coming months in the tactical plan covering our Facilities.

Legislative Environment

GPO's future mission fits within the legislative intent of the public printing and documents statutes of Title 44 of the United States Code. However, these statutes, which date back to 1895, need a number of technical updates. A GPO legislative proposal has been advanced that would make these changes. This proposal would:

- promote the execution of the laws relating to the production, procurement, and dissemination of Government information products and services;
- eliminate duplication of effort, reducing expenditures and promoting economy to the fullest extent consistent with the efficient and effective operation of the Government's information functions; and
- provide for the utilization of electronic information technologies in the dissemination of Government information products and services.

At the same time, while reaffirming the centralization of Federal printing and of the procurement of information products and services throughout the Federal Government, Congress may wish to examine and debate related issues that affect GPO and the Government information community, such as:

- Should the Public Printer serve a fixed minimum term? Frequent changes in the head of the agency will make strategic plans difficult to implement and achieve.
- Presently, Title 44 requires that both the Public Printer and Deputy Public Printer are "practical printer[s] and versed in the art of bookbinding." As GPO continues its transition to electronic products and services, these qualifications may prove counterproductive.
- Any inherent contradictions between the Brooks Act and Title 44, and how they both relate to the rapidly increasing role of technology in information creation, replication, and dissemination, should be resolved.

GPO/2001: Dissemination activities

As with other GPO activities, significant changes will occur in our dissemination activities. The central change that will most affect GPO's dissemination activities is the gradual development and implementation of an electronic dissemination capability that will best serve the needs of our customers. This capability will consist of three basic elements:

- ***FIND, for Federal INformation Directory, a comprehensive Federal information product and service locator system;***
- ***SEND, for Satellite Electronic Network Dissemination, a daily satellite-based dissemination of information products and services; and***
- ***INTERACT, an interactive on-line electronic communication capability.***

FIND will be a universal index to all Government information products and services, incorporating other directories that already exist or are created subsequently. Such an index has long been needed, and fits within GPO's current statutory authority for indexing and cataloging.

Combined with our continued distribution of products that remain in traditional print formats, SEND will fulfill GPO's responsibility to distribute electronic information products and services to the depository libraries. It also will be available to other customers on a subscription basis. At the present time, because of the multiplicity of depository library locations that need to be reached, and their diverse geographical dispersion, satellite dissemination appears to be the optimum and most cost-effective means of distribution. But this does not preclude the utilization of other means of dissemination in combination with—or in place of—satellite dissemination if they should prove to be more cost-effective and efficient.

With SEND, each receiving site would require a receiving station. This station would be linked to a computer on which the transmission would be stored when received. Information on the daily satellite transmission would have prefixes identifying its category and exact nature. Through their receiving stations, depository libraries would be able to control (and even alter daily) their receipt of information to meet their exact needs.

Integrated processing system

An integrated processing system presently under development will make many vital changes in how we serve users of Government information products and services. Among these changes are:

- the establishment of an individual account number for each customer;
- billing of transactions as they are shipped to these accounts (many of which will be prepaid deposit accounts or credit card authorizations);
- a change in subscriptions from a periodic to a standing order basis; and
- increased accountability and results-based performance measures for all segments of our dissemination activities.

Each of these changes is designed specifically to make the use of our dissemination activities easier for libraries, businesses, and members of the public who depend upon them.

While that portion of the transmission containing items of current interest and upcoming information to be disseminated would always be downloaded (in effect, serving as a unilateral bulletin board), among the receiving flexibilities would be:

- an ability to receive and download the entire transmission;
- an ability to select from the transmission, receiving only those portions relevant to the receiver's needs, by setting in advance the categories and nature of information to be received; and
- an ability to receive and edit the entire transmission (or preselected portions thereof), and then interactively preview and accept only the information the receiver wishes to retain.

Once received, the daily satellite download would be available on terminals or workstations, and across any local area network the depository library has in place to provide access for its patrons.

SEND will increase the amount of information available to depository library patrons and dramatically improve its timeliness. It also will allow an expansion of the number of depository libraries because the costs of GPO's Depository Library Program would not increase substantially if additional information is retained by the libraries, or additional sites receive the satellite transmission. This is in sharp contrast to the manner in which the costs of the Program's present paper and microfiche dissemination system are incurred.

Depository libraries would manage the information they receive, with the libraries providing public access to the information through print-on-demand capabilities, or the provision of electronic user access on terminals and research assistance to patrons.

While some libraries may choose to manage historical information storage themselves, moving information off-line as required, other libraries may not. To serve these needs and those of the general public, GPO will have available historical electronic files in formats such as CD-ROM, allowing libraries to purge their on-line electronic systems regularly.

SEND would be available also to private subscribers who purchase this new service through GPO's Sales Program. By purchasing the same receiving equipment that will be required of any depository library, and by paying a nominal annual fee (from which depository libraries would be exempt), information users would be able to receive the full satellite download of information offered through SEND on the same daily basis. Using the same editorial capability on the download, they also would be able customize their transmission to their needs.

However, recognizing that many information users may not want to incur the initial investment in the receiving equipment or an annual access fee, the information in the download would be stored at GPO and also made available on INTERACT. This system would allow a wider audience of Government information users to make use of the electronic database on an as-needed basis.

INTERACT will be a service of GPO's Sales Program. In effect, INTERACT will make an historic change in GPO's general information dissemination activities by allowing them to become bilateral, or interactive, rather than unilateral as they are today. INTERACT will provide on-line access to the database of information products and services residing at, or available through, GPO.

The costs for accessing INTERACT would consist of connect charges and a nominal access charge calculated to recover costs sufficient to make the service self-sustaining. There would be several possibilities for the billing of these costs:

- For regular GPO customers with standing deposit or pre-approved billing accounts, a chargeback against that account would be initiated by the system. Customers would incur their own telecommunication costs for connect time, with a charge to their GPO accounts made only for access time.
- For customers without standing accounts, access could be accomplished through a 900 number carrying a standard charge for both telecommunications connect charges (computed as an expected average cost from all calling points) and access charges.

In addition, many SEND subscribers may not wish to maintain the downloaded information on an ongoing basis. These subscribers, for purposes of research or to

Expanded products and services in GPO's Sales Program

The new services described in this section will expand the information dissemination activities of GPO's Sales Program dramatically, and will include:

- SEND, the same daily satellite transmission to the Depository Library Program, available to Government or private customers who want to regularly obtain the full information download with the same abilities to control the receipt of information for their own purposes;
- INTERACT, an interactive database of information products and services available through telecommunication modem ports to satisfy the needs of information users for irregular use or research;
- a variety of electronic products offered through INTERACT to minimize the costs of downloading extensive files;
- electronic products in various formats;
- print-on-demand products;
- traditional print products; and
- increased access to Government information products and services through bookstores and additional distribution points.

gain access to information they may have otherwise excluded from their normal daily transmission, also would be able to access INTERACT as a separate service through any regular telecommunications modem.

Because the costs of downloading a sizeable file might be substantial, users would have the option of having the file created electronically at GPO and sent in the format of their choice. GPO would have standard formats available, such as disks, tape, and eventually—as the cost becomes reasonable—individually written CD-ROM's. This would minimize connect time and access costs to users at their discretion. Costs for the media and creation time would be calculated for users by the system at the time they placed their orders, and automatically charged to their accounts.

Besides downloading the information, or receiving it in an electronic format of their preference, users would be able to request that print-on-demand products be sent to them. Again, charges would be computed by the system at the time of order and automatically charged to their account. Of course, on-line users also would be able to print directly on their own devices from the system without any additional charge, except for the connect time and access charges required during printing.

Finally, GPO would continue to operate its telephone and mail order fulfillment operations, offering a wide variety of electronic, print-on-demand, and traditional print products.

Bookstores

Currently, GPO has 23 bookstores located around the country. Convenient access to these bookstores by the general public is hampered by the broad geographical dispersion of these stores. If the Government is serious about making information products

and services more accessible, it must expand its outreach through bookstores and other means. A number of strategies to accomplish this should be utilized in combination:

- ***Additional GPO bookstores should be opened, where it can be determined that a GPO bookstore can be successful financially.***
- ***Expanded discounts, and other policies more in keeping with the general publishing industry, should be implemented to encourage greater display and handling of Government titles in private bookstores.***
- ***Some GPO bookstores should be absorbed by the private bookstore industry, in effect creating general bookstores with extensive Government selections in their inventories.***
- ***Print-on-demand capabilities should be introduced into GPO bookstores, private bookstores, and other outlets such as libraries—and possibly other Government information outlets like Federal Information Centers, Agricultural Extension Service offices, and perhaps even Post Offices—to make Government information products and services widely accessible.***
- ***INTERACT terminals should be installed in GPO bookstores, private bookstores, and other outlets, again making Government information products and services accessible to people without their own electronic transmission capabilities.***

Conceivably, the number of locations through which Government information products and services could be made available will increase significantly in the years ahead. A task of this importance must include the participation of other Government agencies and the private bookstore and information sector industries to be successful.

GPO/2001: A few final thoughts

First, to calm any concerns some people who have just finished reading this vision may have, let us repeat one of the central and underlying themes of the preceding pages—***in the future***.

While much of this vision calls for dramatic change, do not forget that there is time in which to phase in its changes. Don't overlook the fact that much of the change will be evolutionary, not revolutionary. Realize that we will all have time in this process to acclimate ourselves to the future.

This document also only reflects our limited vision. There is a great deal of participation in refining this vision to follow. There are the tactical plans, each of which will examine and make the final determinations with regard to each element of this vision. And, there are undoubtedly a number of comments that will follow, all of which will need to be evaluated.

Remember that, "the best way to predict the future is to invent the future," a quotation attributed to Alan Kay, an Apple Fellow and an individual quite dedicated to changes to the future of information.

There are a lot of people who are about to discover, perhaps to their surprise, that the people who constitute GPO today and in its future are among the most inventive people who ever touched information.

It looks to be an exciting future as we reach out together to a new millennium.

The United States Government Printing Office
Advancing information in the electronic information era

GPO/2001: The implementation process ahead

The work of the months ahead will be the development of a dozen and a half tactical plans that will allow the strategic vision of GPO to be refined and realized. A brief description of each of these tactical plans appears in Figure 6 on the next two pages.

During the weeks ahead, teams will be formed to develop the tactical plans required. These plans will identify the key steps that must be taken and tasks that must be completed to accomplish GPO's future mission, and will set forth the specific timetables by which these specific steps and tasks must be concluded.

As the tactical plans are finished, they will be condensed and combined into a final Strategic Plan, entitled ***Blueprint for a New Millennium***. This ***Blueprint*** also will be distributed to provide each of us with a clear idea of where we are heading, so that we can all mutually understand the challenges that lie ahead, prepare for them together, and accomplish our future together.

We liken this process to planning a trip. The document you are holding sets out the destination we plan to reach, and illustrates many of the things we will see when we reach it. But our exact travel route has yet to be decided. The tactical plans will make these determinations and provide us with a schedule that ensures we reach our destination on a timely basis. The document you are holding is perhaps best described as the travel brochure. The tactical plans which will comprise our final Strategic Plan, or ***Blueprint***, will become our maps and itinerary.

Finally, we have indicated that moving GPO into the next millennium will be a participative process. To encourage this, we are asking those who read this to offer us your feedback.

Please send your comments directly to:

Deputy Public Printer
Stop: DP
U.S. GOVERNMENT PRINTING OFFICE
Washington, DC 20401

TACTICAL PLAN	BRIEF DESCRIPTION
Human Resources	
1. Workforce/staffing plan	Determine key recruitment goals; decide how GPO will attract and acquire the talent we need to realize our future; determine changes needed to position classification systems
2. Workforce/environment plan	Determine key changes, innovations, and flexibilities required by changing workforce
3. Workforce/compensation plan	Identify the methods by which GPO will become cost-competitive, how our performance will be measured, and the appropriate compensation and gain-sharing rewards required
4. Workforce/participation plan	Redefine suggestion systems and establish Product Improvement Teams to build involvement and participation in the continual improvement of GPO's products and services
Training	
5. Training plan	Determine impact on present workforce, develop and implement plans to empower GPO workforce to gain the skills required for our future
Products and Services	
6. Traditional products plan	Determine improvements and changes required in traditional print products; determine optimum standard product formats, sizes, and uses; consolidate existing production capacity; reduce idle time; simplify workflow and operations
7. Congressional electronic products and services plan	In partnership with Congressional customers, develop and implement new electronic and print-on-demand products and services to serve Congress, completing the transition to an electronic RECORD by 1993 and other publications by 1996
8. Other electronic products and services plan	In partnership with Executive and Judicial branch customers, develop and implement new electronic and print-on-demand products and services to serve their needs; determine standards for products and services
9. Electronic dissemination plan	Develop and implement an electronic dissemination capability to serve depository libraries and other information users

Figure 6. *Tactical plans required, GPO/2001*

TACTICAL PLAN	BRIEF DESCRIPTION
Products and Services—*continued from preceding page*	
10. Product and services support plan	Implement improvements to contract administration and compliance and other systems that support operations and/or provide information to agency customers
11. Continual Quality Improvement plan	Develop and put in place a total quality management program that involves all GPO employees, customers, and suppliers, in a continual effort to reinvent and improve GPO's products and services
Technology	
12. Capital equipment plan	Determine the capabilities, technology, and equipment required by GPO for our future
Organizational Structure	
13. Organizational plan	Develop and implement simplified and consolidated GPO organizational structure for future; reduce management/supervision layers; push authority and decision-making down; establish administrative and support operations as self-sufficient
Financial Resources	
14. Financial feasibility plan	Prepare full financial feasibility study for all plans to assure adequate resources
15. Systems accountability plan	Develop and implement new pricing methods based on expected costs; introduce fee-based services that incorporate customer-based pricing units and terminology; determine and implement systems to track all critical success factors, and tangible customer and business units
16. Capital assets management plan	Identify and implement improvements to working capital and fixed asset management systems
Facilities	
17. Facilities plan	Design and acquire the proper facilities in concert with GPO's future; consolidate leased space into existing and new facilities
Legislative Environment	
18. Legislative plan	Determine and secure legislative changes required

Figure 6 (continued). *Tactical plans required, GPO/2001*

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